DOCUMENT RESUME

ED 281 638 PS 016 499

AUTHOR Miller, Christy L.; And Others
TITLE Parent Expectations for Adolescent Transitions: What They Are and How They Affect Their Children.
SPONS AGENCY Grant (W.T.) Foundation, New York, N.Y.; National Inst. of Child Health and Human Development (NIH), Bethesda, Md.; National Inst. of Mental Health (DHEW), Rockville, Md.; National Science Foundation, Washington, D.C.
PUB DATE Apr 87
GRANT NICHHD-HD-17296; NIMH-MH-31724; NSF-BSN-8510504; WTGF-83-0917-00
NOTE 28p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Baltimore, MD, April 23-26, 1987). Smudged type in tables may affect legibility.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adolescent Development; Expectation; Experience; *Individual Development; Junior High Schools; *Parent Attitudes; *Parent Influence; Secondary School Teachers
IDENTIFIERS *Early Adolescents; Parent Expectations

ABSTRACT

Two samples of parents and one of teachers were interviewed to determine (1) what parents of early adolescents believe about adolescence as a developmental period and what they expect for their own adolescents' development; (2) junior high school teachers' beliefs about adolescent development; (3) evidence for the effects of personal experience with adolescents on such beliefs; (4) how beliefs about adolescence as a developmental period affect parents' interpretation of their own child's behavior after the transition to junior high school; and (5) the relation between the latter and expectations for change parents held before their child's school transition. Results indicated that parents believed that early adolescence is a difficult time and that teachers and other adults can do much that has an influence on the adolescent. Parents also believed that children entering junior high school/adolescence will take on more responsiblity than previously, and become more concerned with appearance, social activities, and the opposite sex than they had before. Few parents endorsed statements about the child becoming increasingly clumsy or less interested in school during these transitions. Also reported are results of an analysis linking parental beliefs to child adaptation measures, and a comparison of parent beliefs with those of junior high school teachers. The study data is displayed in seven tables and five bar graphs which form the focus of the text. (Author/RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED281638

Parent Expectations for Adolescent Transitions: What They Are and How They Affect Their Children

Christy L. Miller, Jacquelynne S. Eccles,
Rena Goldsmith, and Constance A. Flanagan

In J.S. Eccles (Chair), Parent Socialization of Early Adolescents. Symposium conducted at the biennial meeting of the Society for Research in Child Development, Baltimore, Maryland, April 23-26, 1987.

This research was made possible by grants from the National Institute of Mental Health (MH31724 to Jacquelynne S. Eccles), the National Institute of Child Health and Human Development (HD17296 to Jacquelynne S. Eccles), the National Science Foundation (BSN-8510504 to Jacquelynne S. Eccles and Allan Wigfield and BSN- to Jacquelynne S. Eccles and Jill Becker) and the William T. Grant Foundation (83-0917-00 to Jacquelynne S. Eccles).

Address correspondence and requests for reprints to Christy L. Miller, 5207 Institute for Social Research, The University of Michigan, Ann Arbor, Michigan, 48106.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Christy L. Miller

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 016499

BEST COPY AVAILABLE

A small but growing literature addresses the issue of parents' and other adults' beliefs about child development and what to expect from children at different ages. Goodnow (1984) has argued that such research is interesting because it is informative regarding adult cognitive development, and because beliefs may influence the behavior of adults when they interact with children. Beliefs can also affect parents' expectations for and interpretations of their children's behavior (e.g. Eccles and Jacobs, 1985; Jacobs and Eccles, 1986).

Goodnow, Knight, and Cashmore (1986) suggest that beliefs parents have about developmental processes are acquired through cultural transmission and personal experience. For example, if strong culturally-based stereotypic notions exist about milestones in development, or about behavior at certain ages, parents' beliefs should reflect such stereotypes. But parents' beliefs may also be shaped by experiences they have had either growing up or with their own or other children

Adolescence provides an opportunity to explore the origin of adult beliefs. Strong stereotypes exist in this culture about adolescence. Despite a growing body of empirical evidence refuting such beliefs, "storm and stress" notions continue to be characteristic of cultural expectations.

Few studies have directly addressed the question of what it is that non-researchers believe about adolescence and those studies that do have tended to sample health professionals and undergraduate and graduate students. Lavigne (1977) and Offer, Ostrov and Howard (1981) found that health professionals tend to endorse the storm and stress view of adolescence. College students also tend to endorse certain storm and stress notions, especially in terms of mood, social and family relationships, vocational/educational goals and identity concerns (Holmbeck and Hill 1986; Offer et al., 1981)

It is possible, however, that parents and teachers may not endorse such generalized negative perceptions of adolescence. Unlike mental or medical health workers, who are exposed mostly to sick or troubled adolescents, or college students who interact mostly with others of their own age, parents and teachers spend most of their time with more typical adolescents. Empirical evidence certainly suggests that for most children, adolescence is a relatively stable and harmonious period, with only minor conflicts. (e.g. Bandura & Walters, 1959; Bengtson, 1970; Douvan & Adelson, 1966; Elkin & Westley, 1955; Epperson, 1964;

Offer, 1969; Rutter, Graham, Chadwick, & Yule, 1976). If daily experience can modify general beliefs, then parents and teachers who have prolonged and frequent contact with the more typical adolescent should hold less stereotypic views of adolescents than these other groups. Further, Knight (1985) argues that parents are "developmental optimistists" - that they need to see bad situations as changeable in order to continue in their task of parenting. Thus, even if parents and teachers of adolescents endorse beliefs about adolescence being a difficult time, they may also endorse ideas that the difficulty is not inevitable, and that they or others can have an impact.

For the purposes of the research to be presented today, we have found it useful to differentiate beliefs according to their level of specificity. Social psychological studies of stereotypes suggest that the distinction between "category-based" beliefs (or the more general beliefs regarding a social category such as adolescence) and "target-based" beliefs (beliefs concerning a particular person) is useful. General beliefs may be more influenced by cultural stereotypes and more resistant to change than beliefs or expectations about particular individuals. If this is true, experience with adolescents would be more likely to affect expectations about particular adolescents than general beliefs about adolescence as a developmental period.

Experience might also affect <u>variability</u> of beliefs. To the extent that stereotypes are the primary source of information underlying one's beliefs, variance of the responses from a relatively homogeneous sample of people should be low. Experience, however, provides a new source of information: a source that is likely to be more variable across families. Consequently variance should be higher in families with more experience if experience is influencing parents' beliefs. Again, however, experience might be expected to have its greatest effects on variance in expectations for <u>specific children</u> rather than variance in general stereotypes.

In this study, the following questions are addressed: 1) What do parents of early adolescents believe about adolescence as a developmental period and what do they expect for their own adolescent's development? Parent category-based beliefs will also be briefly compared with beliefs of junior high school teachers. 2) Is there evidence for the effects of personal experience with adolescents on these beliefs? 3) How do beliefs about adolescence as a developmental period affect parents' interpretation of their own child's behavior after the transition to

junior high school in relation to their expectations for change before that transition?

Methods

In order to examine these questions, two samples of parents were asked about their beliefs regarding adolescence in general as well as expectations for their own children's behavior during this stage of life. A sample of teachers was also asked the same "general belief" questions asked of the parents. Table A summarizes the sample Ns, broken down by parent sex and whether or not the child subject in the study was a first or later born. The first sample of parents (which I will refer to as Sample 1) and the teacher sample were obtained as part of a large, longitudinal study of the transition to junior high school. Questions asking this first sample of parents about target-based expectations for their own sons/daughters during adolescence were asked during the fall of their child's sixth grade year.

The questions referring to category-based beliefs about adolescence were included for <u>both</u> teachers and parents in the wave of data collection that occurred in the fall after the transition to junior high school.

The second sample of parents (which I will refer to as Sample 2) consisted of mothers and fathers of 9 to 10 year old girls and 11 to 12 year old boys recruited to participate in a study of hormones and behavior at early adolescence.

Table B lists the scale items. The scales were Likert type: 7 point for parents and 5 point for teachers, ranging from strongly disagree to strongly agree. Some differences in exact wording exist between the samples: for example, since the first set of parents was participating in a study of the transition to junior high school, target-based expectations were worded "I expect that when my child reaches junior high school, he or she will....". The second set of parents was asked "I expect that when my child reaches adolescence he/she will...."

I will be focusing on the results for parents today, with brief comparisons of parent and teacher data.

Results and Discussion

1) To address the first question about which beliefs and expectations were endorsed by parents, and the strength of consensus among parents of early adolescent children, means and variances were calculated for individual items from these scales. Since factor analyses did not yield a clear factor structure in either parent sample, only item level results are presented.

The means and standard deviations for category-based beliefs for all samples are presented in Table 1; those for target-based beliefs are in Table 2. Profile analyses indicated that there were significant differences in item means for both sets of items for all samples.

As predicted, parents and teachers have mixed feelings about adolescence. They believe adolescence is a difficult time of life but that there are things adults can do to make a difference. They also endorse positive target-based expectations to a greater extent than negative target-based expectations.

As you can also see in Table 1, the same pattern is true for teachers. Teachers were only asked the category-based questions, and for the most part they endorse the same items as parents.

2) Two types of comparisons were used to address our second question about the impact of experience on parents beliefs: a) comparisons of mothers and fathers, and b) comparisons of parents who had children older than the early adolescent subject in the study with parents who did not have any older children.

To test the effects of parent sex and parent experience on category-based beliefs, items were grouped into two theoretically meaningful sets: one consisting of items indicating that early adolescence is a difficult time and the other consisting of items indicating that adults can have a positive impact on early adolescents. To test for such effects on target-based beliefs, items suggesting positive or neutral adolescent developments were grouped separately from items suggesting a negative or troubled adolescence. "Neutral" items included those indicating an increasing interest and concern with friends and social activities. In the remaining tables, items are listed in the sets used for analyses.

A) First, differences between mothers and fathers:

Table 3 gives means and standard deviations for mothers and fathers category-based responses separately. In both samples, profile analyses showed that mothers were more likely than fathers to agree with the set tapping a difficult adolescence. Follow-up one-way analyses of variance indicated that in both samples mothers were more likely to endorse items like "the best approach to adolescence is to relax and wait" and physical and hormonal changes are important. In Sample 1, there was also a sex by item interaction, shown in Figure 1, that results from the fact that mothers endorsed the importance of physical and hormonal changes, and the need to relax and wait, more than fathers, but that mothers and fathers were equally likely to feel that early adolescence is a difficult time and that preoccupation with appearance interferes with an adolescent's concentration on academics.

For both samples, there were no differences between mothers and fathers in beliefs about the effectiveness of adults.

In Sample 1, mothers were somewhat more variable than fathers on several items. These are shown in Table 3.

Table 4 gives means for mothers and fathers on target-based belief items. In Sample 1, there was no main effect of parent sex on the positive items, but there was a significant sex by item interaction ($F(6,3214)=13.20$, $p=.0000$) which is shown in figure 2. The interaction is the result of mothers being more likely to expect that their adolescents will "become more involved in social activities" and "become more concerned with appearance" ($F(1,3258)=12.98$, $p=.0001$) while fathers are more likely to expect that their adolescents will socialize more with the opposite sex ($F(1,3255)=30.79$, $p=.0000$), and seek their advice more often ($F(1,3254)=7.19$, $p=.007$). Fathers were also somewhat more likely to say their children would become closer to them. In Sample 2, there were no significant sex differences regarding positive and neutral expectations and no significant interactions.

With regard to the set of target-based items tapping a troubled adolescence, mothers in Sample 1 were more likely to expect difficulty ($F(1,3211)=12.23$, $p=.0005$). They were more likely than fathers to say that their adolescent would be "difficult to get along with" ($F(1,3258)=12.98$, $p=.0003$) and "more concerned

with what friends think than what parents think" ($F(1,3254=27.95$, $p=.0000$). A significant interaction of parent sex and item on the troubled expectation set ($F(3,3209)=7.78$, $p=.0000$), shown in figure 3, results from the fact that mothers endorse the above mentioned items more than fathers, but that there is no difference in mothers' and fathers' expectations for the child becoming "clumsier" or "less interested in school".

In Sample 2, there was a similar interaction, shown in figure 4 ($F(3,150)=3.86$, $p=.01$). Fathers were more likely to say that their child would become less interested in school while mothers were more likely to expect difficulty getting along with their adolescent and an increased concern with friends at the expense of concern with parents.

There were also differences in the variability of mothers' and fathers' target-based beliefs. In sample 1, mothers showed more variance than fathers on all items where there was a difference (see Table 4 for the specific items).

In Sample 2, mothers were significantly more variable with regard to expectations for "taking school more seriously: ($F(1,65520)=8.50$, $p=.0035$) and "becoming more clumsy" ($F(1,65520)=5.90$, $p=.015$). Fathers were more variable in their expectations that involvement in social activities would increase ($F(1,64268)=12.11$, $p=.0005$).

Overall, the picture that emerges from these data on sex differences is one of a greater belief on the part of mothers about potential difficulty, and the importance of hormonal and physical change. Because the physical changes of puberty are more salient for females, and remain more salient across the lifespan, it is not surprising that mothers would endorse these beliefs more. However, although mothers are more likely to think an appropriate response to adolescence is to relax and wait it out, they do not necessarily feel less efficacious than fathers, as shown by the fact that they are equally likely to endorse the set of items measuring beliefs that adults can help.

In terms of target-based expectations, there are indications from these data that mothers are more concerned about potential conflict for their adolescents between what friends think and what adults think, and mothers are less likely to expect positive developments in terms of their relationship with their adolescent. Fathers are more optimistic in this regard. Perhaps this reflects a greater

tendency of mothers to pay attention to or worry about interpersonal dynamics and the subtleties of change that occur during adolescence. Fathers may focus more on goal-oriented aspects of relationships and emphasize the importance of compatibility on adult-type issues of school and vocational decision rather than parent vs. peer relationships. To this extent, they may be less concerned with the more subtle interpersonal conflicts that might take place. This line of reasoning is supported by research and clinical evidence suggesting that mothers are more concerned with expressive roles and needs in the family and that fathers are more concerned with instrumental roles and needs. And despite changing parental roles, there is evidence that such sex differences still exist.

Our results also show more variability in the responses mothers give; these differences occur for both samples and are strongest for target-based beliefs, although some differences also exist in the first sample concerning category-based beliefs. This may be due to more time that mothers spend with their early adolescents, making them more likely to have noticed individual differences and exceptions to stereotypes. If this is true, one would expect the strongest differences to occur among target-based beliefs, as indeed they have in this study. Again, the hypothesis that mothers spend more time with their children is supported by recent time use studies showing that despite changing roles, mothers still spend more time with their children than fathers.

B) Let's move on to differences between parents who have experience with older adolescents and parents who don't:

Table 5 shows means for parents with and without experience regarding category-based beliefs. There were no differences for beliefs representing a difficult adolescence in either sample. In sample 2, for "adults can help" items, parents of first-born adolescents were more likely than parents of later born children to feel that adults can make a difference ($F(1,148)=4.29$, $p=.04$). However, the only trend toward significance at the univariate level was for the item "teachers can have a powerful influence on early adolescents" ($F(1,150)=3.62$, $p=.06$). In Sample 1 of parents, no differences between the "experience" groups emerged for "adults can help" items.

In Sample 1, there were different variances on 3 of the category-based items between parents with more and less experience: two in which parents with experience showed more variability and one on which parents without experience

were more variable. There were no differences in the variance of category-based beliefs between parents with more or less experience in Sample 2.

Table 6 gives means for target-based beliefs by experience of parent. In Sample 1, parents with experience were less likely to endorse positive and neutral target-based expectations ($F(1,3219)=8.00$, $p=.005$). These parents were less likely to expect their own adolescent to be more concerned about appearance ($F(1,3263)=8.03$, $p=.005$), to be closer to them ($F(1,3247)=11.99$, $p=.0005$), and to seek their advice more often ($F(1,3254)=8.31$, $p=.004$). There was a significant interaction (shown in Figure 5) of item and experience, with experienced parents less likely to endorse the above items and equally likely to endorse other items ($F(6,3214)=3.01$, $p=.006$). In Sample 2, parents of later borns were also less likely to endorse positive or neutral target-based beliefs ($F(1,151)=7.58$, $p<.01$). In comparison to parents of first-borns, parents with more experience were less likely to expect that their children would take on more responsibility as they reached adolescence ($F(1,152)=7.63$, $p < .01$), and that their children would become more involved in social activities ($F(1,151)=4.92$, $p< .03$).

Experienced parents in Sample 1 were also less likely to endorse the set of negative target-based items ($F(1,3211)=11.24$, $p=.0008$); there was no main effect of parent experience in the second sample.

In addition, as predicted, experienced parents were significantly more variable in their responses to many of the target-based items, and these are specified in Table 7. These differences were more frequent and stronger than those for category-based beliefs in both samples.

To summarize the effects of "parental experience" on category-based beliefs: the only difference between the two groups of parents is that parents who have already had experience with an adolescent are less likely to endorse the importance or influence of adults. This seems to result from the fact that they are less likely to think that teachers can be a powerful influence on adolescents. Perhaps after having at least one child go through junior high school these parents are simply more realistic about the impact of teachers at this level. Midgley, Feldlaufer and Eccles (1987) have shown that junior high school teachers feel less efficacious than elementary school teachers, and that this influences a variety of student outcomes in the classroom. To the extent such attitudes are communicated to the parent, parents who have had a child go through junior high

school would be expected to endorse the importance of teachers less.

In term of target-based expectations, parents with experience are less likely to expect just about everything. They are less stereotyped about negative developments or preoccupation with social things, but they are also less likely to expect positive developments in terms of relationship with their adolescents. They are generally moderate, indicating that experience may teach parents that adolescence isn't all that bad, but it's not all that great either.

We do find the predicted differences between parents with and without experience on variability of responses. Where differences in variability exist, in all but one case, parents with more experience show greater variability. In addition, these differences are much stronger and more consistent for the target-based items than category-based items. It seems that experience is having its largest impact, not necessarily on mean levels of expectations but on the variability of expectations. As hypothesized with mothers, the more time and experience one has with adolescents the more information one has to draw on, other than cultural stereotypes. Parents who have already experienced adolescence with at least one child are more likely to have seen that events during adolescence vary to a large degree depending on individuals and circumstances. The fact that that variance differences are larger and more frequent for expectations about individuals than they are for stereotypes suggests that the effect of this experience does not necessarily generalize - but that it remains rather specific to individuals.

3) Lastly, we are interested in how parents' beliefs affect their interpretation of their own child's behavior as that child makes the transition to junior high school. In Sample 1, parents answered questions about their own expectations for their children when they entered junior high school. After the child made the junior high school transition, these parents were asked the same set of questions, only phrased as "Now that my child is in junior high school, h/she is . . . more responsible, more difficult to get along with, etc." We have begun to look at the effect of parent beliefs on parents' interpretations of their children's' behavior after the transition, in comparison to their expectations for what would occur. To do this we first calculated difference scores where the parent's expectation for a behavior before the transition was subtracted from the parent's rating of that same behavior after the transition. A positive score on this variable indicated that after the transition the parent saw more of that particular behavior in

his/her child than he/she expected to see. We then regressed parent beliefs on these difference scores. In the regression analyses we controlled for teacher ratings of the child's adjustment to junior high school, using this as a proxy for how the child actually was reacting after the transition.

Four of the beliefs had significant relationships to change in target-based beliefs. Shown in Table 7, these were "Early adolescence is a difficult time of life", "Adolescents are so influenced by their friends that what adults say or do matters little", "There are lots of things adults can do to make their relationship with their adolescents a good one", and "Adolescents are so concerned with looks that it is difficult for them to focus on schoolwork".

The beta weights for the significant differences are also presented in Table 7. They all go in the predicted direction. For example, parents who believe early adolescence is a difficult time endorse the following target-based beliefs more post-transition: my child is more concerned with friends than parents, and my child is more clumsy.

Thus, controlling for objective reports of the child's actual adjustment to junior high school, parent beliefs seem to influence how they ultimately interpret their own child's behavior. To the extent that parents' beliefs about and interpretations of the behavior of their own children affect how they interact with those children, beliefs about adolescence have important implications for adolescent adjustment.

References

Bandura, A., & Walters, R.H. (1959). Adolescent aggression. New York: Ronald.

Bengtson, V.L. (1970). The generation gap: A review and typology of social-psychological perspectives. Youth and Society, 2, 7-32.

Douvan, E. & Adelson, J. (1966). The adolescent experience. N.Y.: Wiley.

Eccles, J.S. & Jacobs, J. (1986). Social forces shape math participation. Signs, 11, 367-380.

Elkin, F. & Westley, W.A. (1955). The myth of adolescent culture. American Sociological Review, 20, 680-684.

Epperson, D.C. (1964). A re-assessment of indices of parental influence in *The Adolescent Society*. American Sociological Review, 29, 93-96.

Goodnow, J.J. (1984). Parents' ideas about parenting and development: A review of issues and recent work. In M. Lamb, A. Brown and B. Rogoff (Eds.), Advances in developmental psychology, New Jersey: L.E.A. Publishers.

Goodnow, J., Knight, R. & Cashmore, J. (1986). Adult social cognition: Implications of parent's ideas for approaches to development. In M. Perlmutter (Ed.), Cognitive perspectives on children's social and behavioral development. Minnesota Symposia on Child Psychology, Vol 18., New Jersey: Lawrence Erlbaum Associates

Holmbeck, G.N. & Hill, J.P. (1986). Beliefs in storm and stress notions of adolescence: Prevalence and developmental antecendents. Paper presented at the first biennial meeting of the Society for Research on Adolescence, Madison, Wisconsin, March 21-23.

Jacobs, J., & Eccles, J.S. (1985). Science and the media: Benbow and Stanley revisited. Educational Researcher, 14, 20-25.

Knight, R.A. (1985). Parents as developmental optimists. Paper presented at the bienniel meeting of the Society for Research in Child Development, Toronto,

Canada, April.

Lavigne, J.V. (1977). The pediatric hospital staff's knowledge of normal adolescent development. Journal of Pediatric Psychology, 2(3), 98-100.

Midgley, C., Feldlaufer, H., & Eccles, J. (1987). The transition to junior high school: Beliefs of pre- and post-transition teachers.

Offer, D. (1969). The psychological world of the teen-ager: A study of normal adolescent boys. New York: Basic Books.

Offer, D. Ostrov, E. & Howard, K.I.(1981). The mental health professional's concept of the normal adolescent. Archives of General Psychiatry, 38, 149-153.

Rutter, M., Graham, P., Chadwick, O.F.D., & Yule, W. (1976). Adolescent turmoil: Fact or fiction? Journal of Child Psychology and Psychiatry, 17, 35-56.

Table A. Sample sizes

	Sample 1: Parents		Sample 2: Parents	Sample 3: Teachers
	Wave 1	Wave 3		
Female:	1962	1214	89	30
Male:	1353	761	67	34
Parents with no older adolescents:	1286	798	120	---
Parents with older children:	2029	1177	84	---

Table B. Scale Items

Category-Based Beliefs

We are interested in your opinions about adolescence as a time of life. How much do you agree or disagree with the following statements?

Adolescence is a difficult time of life for children and their parents.
The most sensible approach to adolescence is to relax and realize that in time things will get better.
Adolescents are so influenced by their friends that what adults say or do matters very little.
There are lots of things parents can do to make their relationship with their adolescent a good one.
Changes in hormones make adolescence a difficult period of life.
Adolescents are so concerned with how they look that it is difficult for them to focus on schoolwork.
Teachers can have a powerful influence on adolescents.
Changes in behavior during adolescence are mainly due to the physical changes which are occuring.
The junior high years are successful only with effort.

Target-Based Beliefs

I expect that when my child reaches adolescence (junior high school) s/he will:

take on more responsibilities
be more difficult to get along with
be more concerned about his/her appearance
become more involved in social activities
take school work more seriously
be clumsier
be closer to me because we can share more adult interests
seek my advice more often
be less interested in school
socialize more with members of the opposite sex
be more concerned with what his/her friends think than what I think

Table 1. Means and Standard Deviations of Category-Based Beliefs in Three Samples

	Teachers	Parents (Sample 1)	Parents (Sample 2)
	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)
There are lots of things parents can do to make their relationship with their adolescent good	4.58 (0.69)	5.82 (1.19)	6.37 (0.90)
Adolescence is a difficult time of life	4.19 (0.81)	5.02 (1.49)	5.86 (1.29)
Teachers can have a powerful influence on adolescents.	4.02 (0.83)	5.31 (1.26)	5.80 (1.11)
Changes in hormones make adolescence a difficult time.	4.00 (0.87)	5.09 (1.39)	5.52 (1.27)
The junior high school years are successful only with effort.	3.84 (0.91)	5.22 (1.30)	N/A
Changes in behavior at adolescence are mainly due to physical changes.	3.27 (0.78)	4.53 (1.32)	4.48 (1.35)
The most sensible approach to adolescence is to relax and wait.	3.23 (1.15)	4.85 (1.47)	5.11 (1.61)
Adolescents are so concerned with how they look, it's hard to focus on schoolwork.	2.98 (0.97)	3.47 (1.47)	3.39 (1.47)
Adolescents are so influenced by their friends that adults matter little.	2.69 (1.17)	3.66 (1.55)	2.95 (1.64)

Table 2. Means and Standard Deviations of Target-Based Beliefs in Two Samples

	Parents (Sample 1) Mean (S.D.)	Parents (Sample 2) Mean (S.D.)
I expect that when my child reaches adolescence s / he will:		
be more concerned about his/ her appearance	5.80 (1.17)	6.05 (0.99)
become more involved in social activities	5.43 (1.15)	5.77 (1.15)
take on more responsibilities	5.32 (1.12)	5.82 (1.24)
socialize more with members of the opposite sex	5.14 (1.34)	5.80 (0.95)
be more concerned with what his/her friends think then what I think	4.86 (1.59)	5.49 (1.27)
take school work more seriously	4.78 (1.36)	4.63 (1.37)
seek my advice more often	4.23 (1.42)	3.67 (1.31)
be closer to me because we can share more adult interests	4.08 (1.50)	4.05 (1.51)
be more difficult to get along with	3.40 (1.68)	4.36 (1.73)
be less interested in school	2.73 (1.54)	2.91 (1.49)
be clumsier	2.52 (1.53)	2.46 (1.36)

Table 3. Category-based beliefs of Mothers and Fathers: Means and Standard Deviations

	Parents (Sample 1) Mothers / Fathers Mean(S.D.)/Mean(S.D.)	Parents (Sample 2) Mothers / Fathers Mean(S.D.)/Mean(S.D.)
(DIFFICULT ADOLESCENCE):		
1. Adolescence is a difficult time of life	5.04(1.54) 4.97(1.43)[a]	6.06(1.20) 5.59(1.37)*
2. The most sensible approach to adolescence is to relax and wait.	5.02(1.45) 4.59(1.47)***	5.36(1.56) 4.77(1.62)*
3. Changes in hormones make adolescence a difficult time.	5.22(1.41) 4.88(1.34)***	5.74(1.28) 5.26(1.22)*
4. Adolescents are so concerned with how they look, it's hard to focus on schoolwork.	3.45(1.51) 3.47(1.41)[a]	3.44(1.52) 3.93(1.40)
5. Changes in behavior at adolescence are mainly due to physical changes.	4.60(1.36) 4.42(1.25)**[a]	4.58(1.39) 4.38(1.31)
(ADULTS CAN HELP):		
1. Adolescents are so influenced by their friends that adults matter little.	3.69(1.59) 3.59(1.48)[a]	2.94(1.71) 2.97(1.56)
2. There are lots of things parents can do to make their relationship with their adolescent good	5.88(1.22) 5.77(1.11)[b]	6.45(0.89) 6.26(0.92)
3. Teachers can have a powerful influence on adolescents.	5.32(1.30) 5.33(1.20)[a]	5.79(1.10) 5.83(1.14)
4. The junior high school years are successful only with effort.	5.24(1.33) 5.17(1.24)[a]	N/A

*mean: $p < .05$
**mean: $p <= .01$
***mean: $p <= .0001$

[a] variance: $p <= .05$
[b] variance: $p <= .01$

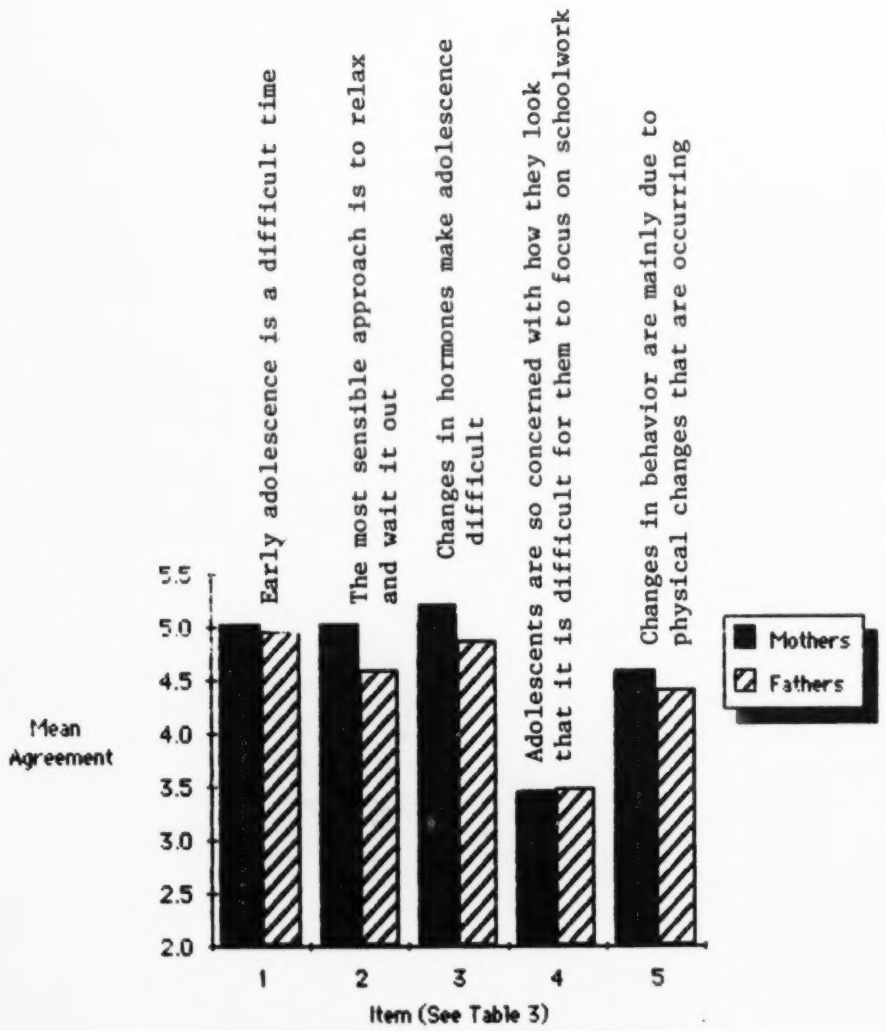

Figure 1. Interaction of sex of parent with item: Category-based beliefs about a difficult adolescence (Sample 1)

Table 4. Target-based beliefs of Mothers and Fathers: Means and Standard Deviations

	Parents (Sample 1) Mothers / Fathers Mean(S.D.)/Mean(S.D.)	Parents (Sample 2) Mothers / Fathers Mean(S.D.)/Mean(S.D.)
I expect that when my child reaches adolescence s / he will:		
(POSITIVE/NORMAL):		
1. take on more responsibilities	5.30(1.14) 5.38(1.07)	5.86(1.25) 5.77(1.24)
2. be more concerned about his/ her appearance	5.88(1.16) 5.39(1.13)****	6.11(0.99) 5.95(0.98)
3. become more involved in social activities	5.46(1.16) 5.39(1.13)	5.97(0.92) 5.51(1.37)**c
4. take school work more seriously	4.79(1.38) 4.77(1.34)	4.83(1.53) 4.36(1.08)b
5. be closer to me because we can share more adult interests	4.00(1.52) 4.13(1.45)a	3.99(1.46) 4.12(1.57)
6. seek my advice more often	4.18(1.45) 4.32(1.36)**a	3.73(1.23) 3.59(1.41)
7. socialize more with member of the opposite sex	5.02(1.40) 5.29(1.24)****d	5.77(0.93) 5.83(0.97)
(TROUBLED):		
1. be more difficult to get along with	3.89(1.69) 3.66(1.65)***	4.55(1.69) 4.09(1.76)
2. be clumsier	2.53(1.58) 2.52((1.46)b	2.50(1.52) 2.41(1.14)a
3. be less interested in school	2.73(1.57) 2.72(1.48)a	2.75(1.58) 3.12(1.34)
4. be more concerned with what his/her friends think than what I think	4.98(1.59) 4.67(1.56)****	5.72(1.09) 5.18(1.42)**

** mean: $p < .01$
*** mean: $p < .001$
**** mean: $p < .0001$

a variance: $p < .05$
b variance: $p < .01$
c variance: $p < .001$
d variance: $p < .0001$

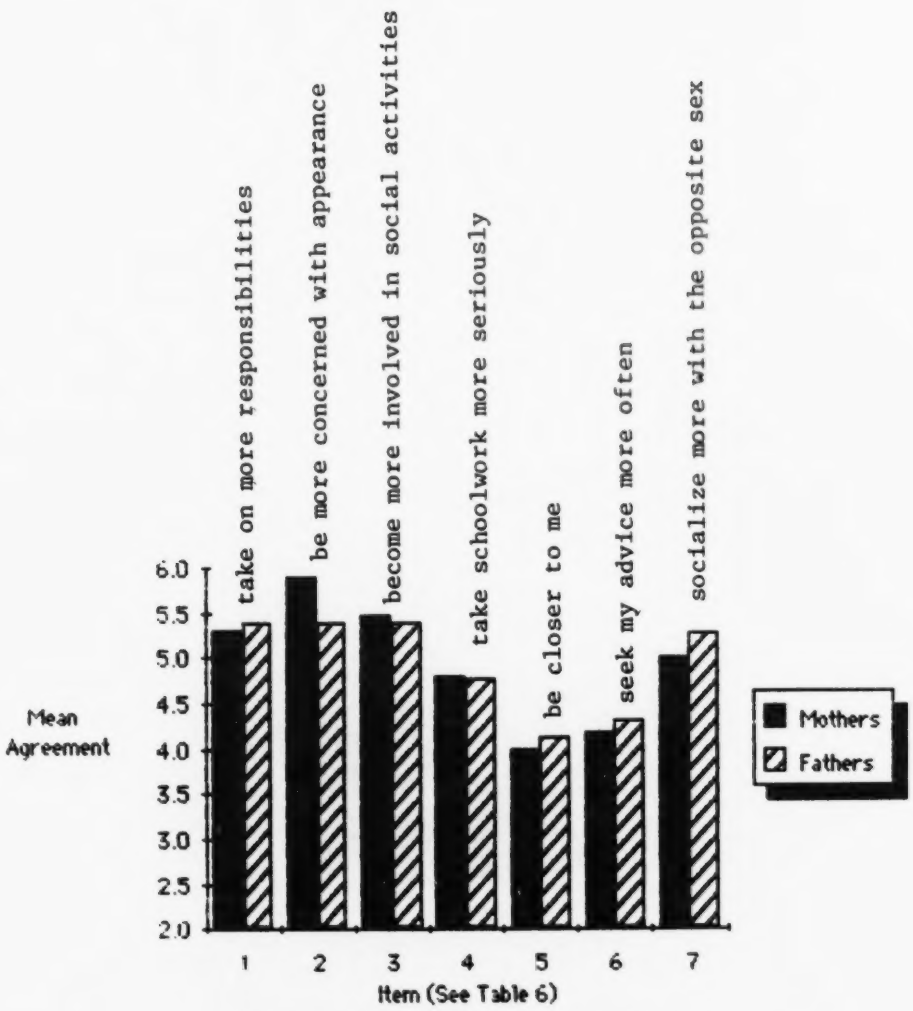

Figure 2. Interaction of parent sex and item: Positive/neutral target-based beliefs (Sample 1)

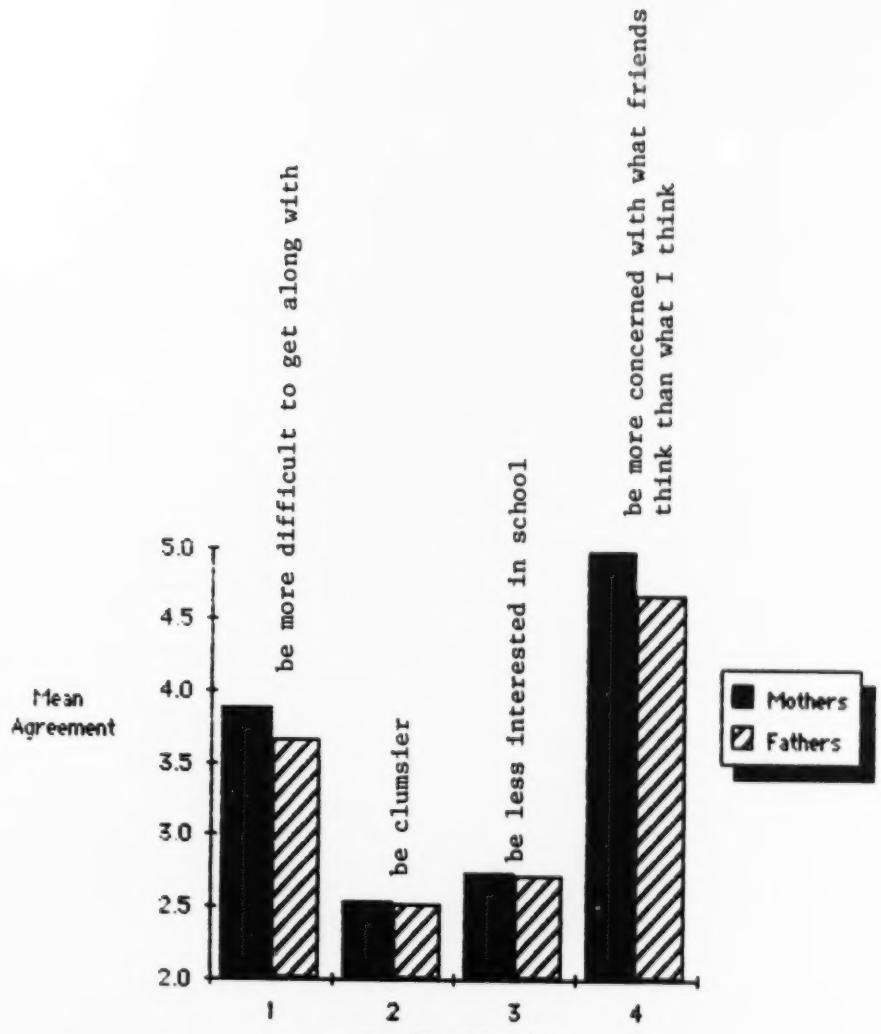

Figure 3. Interaction of parent sex and item: Negative target-based beliefs (Sample 1)

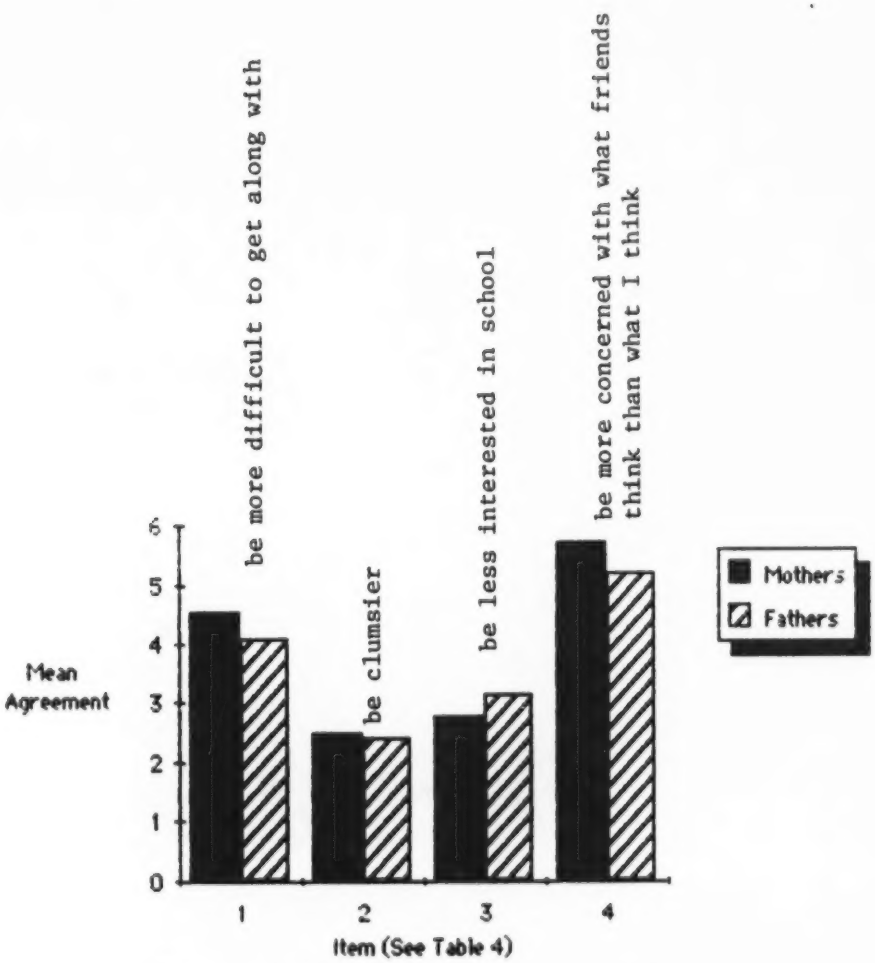

Figure 4. Interaction between sex of parent and item: Negative target-based beliefs (Sample 2)

Table 5. Category-based beliefs of Parents with and without Experience: Means and Standard Deviations

	Parents (Sample 1)	Parents (Sample 2)
	No Experience / Experience	No Experience / Experience
	Mean (S.D.) / Mean (S.D.)	Mean (S.D.) / Mean (S.D.)
(DIFFICULT ADOLESCENCE):		
1. Adolescence is a difficult time of life	5.04 (1.43) 4.99 (1.53)[a]	5.82 (1.34) 5.91 (1.22)
2. The most sensible approach to adolescence is to relax and wait.	4.78 (1.41) 4.89 (1.51)[a]	5.15 (1.59) 5.06 (1.66)
3. Changes in hormones make adolescence a difficult time.	5.12 (1.35) 5.08 (1.41)	5.44 (1.24) 5.67 (1.31)
4. Adolescents are so concerned with how they look, it's hard to focus on schoolwork.	3.46 (1.44) 3.46 (1.49)	3.25 (1.44) 3.59 (1.49)
5. Changes in behavior at adolescence are mainly due to physical changes.	4.54 (1.30) 1.53 (1.33)	4.58 (1.41) 4.38 (1.29)
(ADULTS CAN HELP):		
1. Adolescents are so influenced by their friends that adults matter little.	3.66 (1.55) 3.65 (1.55)	2.79 (1.59) 3.18 (1.69)
2. There are lots of things parents can do to make their relationship with their adolescent good	5.77 (1.23) 5.87 (1.14)[a]	6.37 (0.86) 6.35 (0.86)
3. Teachers can have a powerful influence on adolescents.	5.29 (1.24) 5.34 (1.28)	5.95 (1.09) 5.61 (1.12)*
4. The junior high school years are successful only with effort.	5.19 (1.31) 5.23 (1.29)	N/A

*mean: $p < .10$ [a]variance: $p < .05$

Table 6. Target-based beliefs of Parents with and without Experience: Means and Standard Deviations

	Parents (Sample 1) No Experience / Experience Mean(S.D.)/Mean(S.D.)	Parents (Sample 2) No Experience / Experience Mean(S.D.)/Mean(S.D.)
I expect that when my child reaches adolescence s / he will:		
(POSITIVE/NORMAL):		
1. take on more responsibilities	5.35(1.08) 5.30(1.15)[b]	6.08(1.05) 5.51(1.42)**[b]
2. be more concerned about his/ her appearance	5.88(1.09) 5.76(1.21)**[d]	6.13(0.87) 5.53(1.36)[a]
3. become more involved in social activities	5.45(1.09) 5.42(1.18)[b]	5.94(0.94) 5.53(1.36)*[b]
4. take school work more seriously	4.77(1.33) 4.79(1.39)	4.78(1.35) 4.43(1.37)
5. be closer to me because we can share more adult interests	4.17(1.45) 3.98(1.53)***[a]	4.20(1.47) 3.83(1.54)
6. seek my advice more often	4.32(1.37) 4.18(1.44)**	3.76(1.26) 3.53(1.37)]
7. socialize more with member of the opposite sex	5.17(1.26) 5.12(1.39)[c]	5.83(0.89) 5.75(1.02)
(TROUBLED):		
1. be more difficult to get along with	3.94(1.64) 3.70(1.69)****	4.18(1.68) 4.60(1.78)
2. be clumsier	2.57(1.54) 2.49(1.52)	2.44(1.34) 2.49(1.40)
3. be less interested in school	2.80(1.52) 2.69(1.56)	2.90(1.45) 2.92(1.55)
4. be more concerned with what his/her friends think then what I think	4.91(1.54) 4.84(1.62)[a]	5.58(1.22) 5.35(1.33)

*mean: $p < .05$
**mean: $p < .01$
***mean: $p < .001$
****mean: $p < .0001$

[a] variance: $p <= .05$
[b] variance: $p < .01$
[c] variance: $p < .001$
[d] variance: $p < .0001$

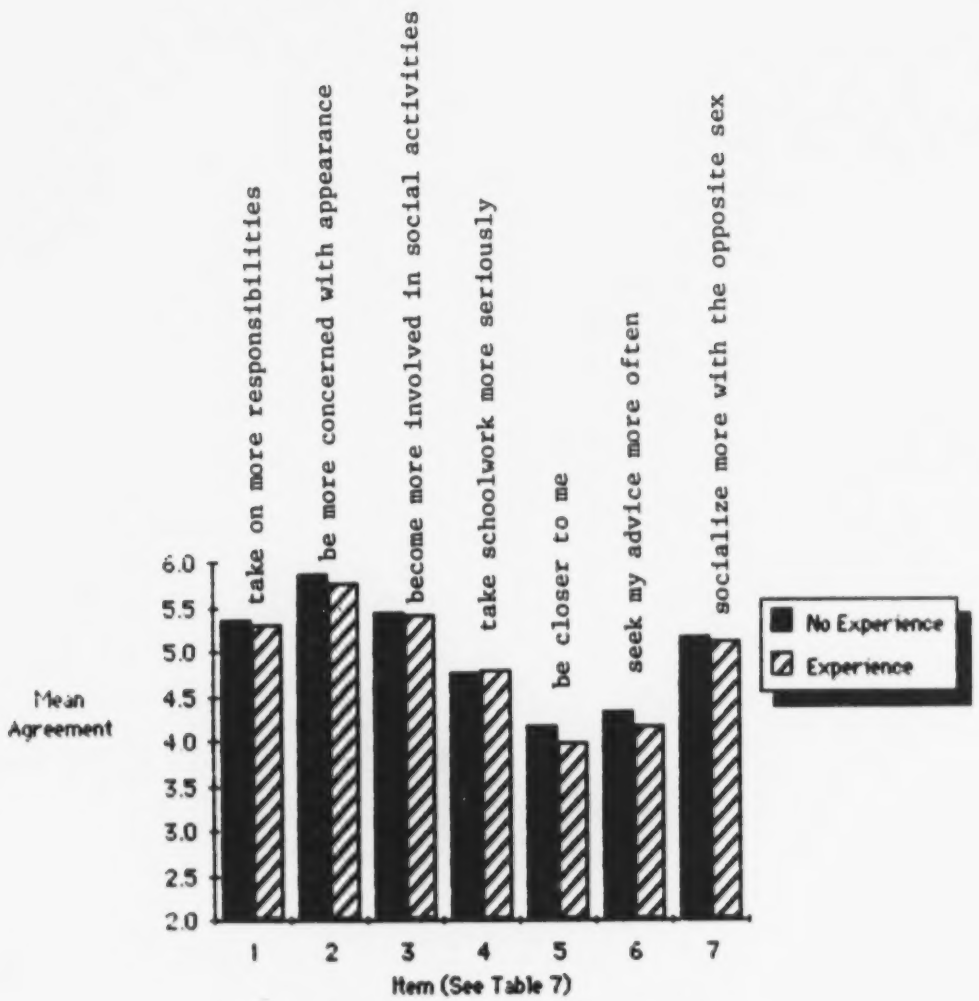

Figure 5. Interaction of parent experience and item: Positive/neutral target-based beliefs (Sample 1)

Table 7. The Effects of Category-Based Beliefs on Change in Target-Based Beliefs

	F	Degrees of Freedom	Beta	R^2
Early adolescence is a difficult time of life:				
Child is more concerned with friends than parents	17.45****	1,1600	.27	.01
Child is more clumsy	5.18*	1,1600	.14	.003
Adolescent are so influenced by friends that what adults say or do matters little:				
Child is more concerned with friends than parents	39.22****	1,1599	.34	.02
Child is more difficult to get along with	14.80****	1,1599	.23	.01
Child takes school more seriously	10.27***	1,1599	-.16	.02
Child is more likely to seek advice	10.49***	1,1599	-.16	.01
Child socializes more with the opposite sex	8.16**	1,1599	.15	.01
Child is more clumsy	6.08**	1,1599	.13	.004
Child is closer to parents	6.23**	1,1599	-.13	.004
There are lots of things adults can do to make their relationship with their adolescent a good one:				
Child is more likely to seek advice	5.87*	1,1601	.22	.004
Child is more concerned with friends than with parents	5.56*	1,1601	-.25	.003
Child is closer to parents	4.59*	1,1601	.21	.003
Adolescents are so concerned with how they look that it is difficult for them to focus on their schoolwork:				
Child is more concerned with friends than with parents	25.99****	1,1599	.29	.02
Child takes school more seriously	18.99****	1,1599	-.23	.02
Child is more interested in the opposite sex	12.56***	1,1599	.19	.01
Child is less interested in school	8.00**	1,1599	.17	.01
Child is more responsible	7.42**	1,1599	-.13	.01
Child is more difficult to get along with	4.05**	1,1599	.12	.003
Child is more clumsy	4.34*	1,1599	.12	.003

* $p < .05$
** $p < .01$
*** $p < .001$
**** $p < .0001$